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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,827	11/14/2003	Timothy W. Vanderveen	61615	3200
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FULWIDER PATTON 6060 CENTER DRIVE 10TH FLOOR LOS ANGELES, CA 90045				
			EXAMINER KOSOWSKI, ALEXANDER J	
			ART UNIT 2125	PAPER NUMBER

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/714,827	Applicant(s) VANDERVEEN, TIMOTHY W.	
	Examiner Alexander J. Kosowski	Art Unit 2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-22, 25-39 and 42-49 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 23, 24, 40 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/14/03, 9/30/05</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

- 1) Claims 1-49 are presented for examination.

Claim Objections

- 2) Claims 6-7, 16, 18, 23-24 and 40-41 are objected to because of the following informalities:

Referring to claim 16, two claims are labeled with this claim number. For the purposes of examining, the “second” claim 16 is assumed to be claim 17.

Referring to claim 18, it does not exist. For purposes of examining, claim 17 is assumed to be claim 18.

Appropriate correction is required.

- 3) Claims 6-7, 23-24 and 40-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

- 4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 5) Claims 35, 37-38 and 42-44 are rejected under 35 U.S.C. 102(e) as being unpatentable by McClendon (U.S. Pat 6,757,630).

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Referring to claim 35, McClendon teaches a method comprising: prompting an operator to induce a pressure change in a fluid conduit (col. 22 lines 49-65); sensing pressure in the fluid conduit upstream from the flow control device and generating pressure signals in response to the pressure sensed, processing the pressure signals to detect a pressure change in the fluid conduit in response to the step of prompting the operator to induce the pressure change and indicating a connection verification that the fluid supply is connected to the flow control device when the induced pressure change is detected from processing the pressure signals (col. 7 lines 60-67 and col. 23 lines 20-27 and Figure 4, whereby occlusion detection is a method of verifying a connection).

Referring to claim 37, see rejection of claim 3 below.

Referring to claim 38, see rejection of claim 4 below.

Referring to claims 42-44, see rejection of claims 8-10 below.

Claim Rejections - 35 USC § 103

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7) Claims 1, 3, 4, 8-12, 18, 20-21 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClendon, further in view of Elsberry (U.S. Pat 6,423,029).

Referring to claim 1, McClendon teaches a system comprising a pressure sensor assigned to a flow control device and coupled to a fluid conduit, the pressure sensor sensing pressure of

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the conduit and providing pressure signals in response to such sensed pressure (col. 7 lines 60-67 and col. 23 lines 20-27 and Figure 4); and a processor (col. 13 lines 19-40) having a connection verification mode in which the processor is configured to provide a verification indication when the processor receives pressure signals indicative of an expected pressure change in the conduit (col. 22 lines 49-65). However, McClendon does not explicitly teach that the pressure sensor is located specifically between the fluid supply and the flow control device.

Elsberry teaches a system comprising a fluid supply and a flow control device, whereby a pressure sensor is mounted between the fluid supply and flow control device and a processor is utilized to perform tests on the flow control system (col. 4 lines 24-44 and col. 5 lines 1-10 and Figure 3).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize a pressure sensor between the fluid supply and flow control device in the invention taught above since this would allow upstream fluid pressure to be monitored to determine whether it is outside an acceptable range, and would allow an alarm to be generated (Elsberry, col. 4 line 53 through col. 5 line 10).

Further, it is noted that a recitation of the intended use of the claimed invention, namely “to thereby verify that the particular fluid supply is connected to the flow control device”, must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Referring to claim 3, McClendon teaches that the processor in the connection verification mode is configured to detect that the expected pressure change is at a second flow control device and indicate an identity of the second flow control device (col. 6 lines 57-58, whereby multiple test stations comprising multiple pumps and sensors may be utilized).

Referring to claim 4, McClendon teaches that the processor in the connection verification mode is further configured to: prompt an operator to induce a pressure change in the fluid conduit; and monitor the pressure signals to detect the operator-induced pressure change (col. 22 line 58 through col. 23 line 8).

Referring to claims 8-10, McClendon teaches that the processor in the connection verification mode is configured to prompt the operator to squeeze, tap, or change the height of the upstream fluid supply segment to induce the pressure change in the fluid conduit (col. 22 line 58 through col. 23 line 8, whereby all of the above may be considered methods of “clamping” a fluid supply).

Referring to claim 11, McClendon teaches the above. However, McClendon does not explicitly teach that the pressure sensor is mounted to the flow control device and is located adjacent and upstream in relation to the flow control device.

Elsberry teaches a system comprising a fluid supply and a flow control device, whereby a pressure sensor is mounted upstream between the fluid supply and flow control device and a processor is utilized to perform tests on the flow control system (col. 4 lines 24-44 and col. 5 lines 1-10 and Figure 3).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize a pressure sensor upstream between the fluid supply and flow control device

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in the invention taught above since this would allow upstream fluid pressure to be monitored to determine whether it is outside an acceptable range, and would allow an alarm to be generated (Elsberry, col. 4 line 53 through col. 5 line 10).

Referring to claim 12, McClendon teaches that the pressure sensor is located and configured such that when the fluid conduit is mounted at the flow control device, the fluid conduit also must be mounted in operable communication with the pressure sensor (col. 7 lines 60-67 and col. 23 lines 20-27 and Figure 4).

Referring to claim 18, McClendon teaches a system comprising: a plurality of pressure sensors, each of which is assigned to a separate pump channel and each of which is coupled to the fluid conduit of the respective pump channel, each pressure sensor sensing pressure of the respective conduit and providing pressure signals in response to such sensed pressure (col. 7 lines 60-67 and col. 23 lines 20-27 and Figure 4, whereby according to col. 6 lines 57-58, multiple test stations comprising multiple pumps and sensors may be utilized); wherein the common processor has a connection verification mode in which the processor is configured to provide a verification indication when the processor receives pressure signals indicative of an expected pressure change in a particular conduit (col. 6 lines 57-58 and col. 22 lines 49-65). However, McClendon does not explicitly teach that the pressure sensor is located specifically between the respective fluid container and the pump channel.

Elsberry teaches a system comprising a fluid supply and a flow control device, whereby a pressure sensor is mounted between the fluid supply and pump and a processor is utilized to perform tests on the flow control system (col. 4 lines 24-44 and col. 5 lines 1-10 and Figure 3).

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Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize a pressure sensor between the respective fluid container and pump channel in the invention taught above since this would allow upstream fluid pressure to be monitored to determine whether it is outside an acceptable range, and would allow an alarm to be generated (Elsberry, col. 4 line 53 through col. 5 line 10).

Further, it is noted that a recitation of the intended use of the claimed invention, namely “to thereby verify that the particular fluid container is connected to the particular pump channel through the particular conduit”, must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Referring to claim 20-21, see rejection of claims 3-4 above.

Referring to claim 25-27, see rejection of claims 8-10 above.

Referring to claim 28-29, see rejection of claims 11-12 above

8) Claims 2, 5, 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClendon, further in view of Elsberry, further in view of Peterson et al (U.S. PG PUB 2002/0183693).

Referring to claim 2, McClendon and Elsberry teach the above. However, they do not explicitly teach that the processor is further configured to delay the flow control device from

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moving fluid through the conduit until the processor receives pressure signals indicative of an expected pressure change in the conduit to thereby verify that the particular fluid supply is connected to the flow control device.

Peterson teaches a fluid control system whereby a pump waits until expected pressure changes and signals from sensors are received to move fluid through a conduit (Paragraph 0345).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to delay a flow control device until pressure signals are received in the invention taught above since this would prevent a pump from running if there was a malfunction in the system or an incorrect fluid supply (Peterson, Paragraph 0345).

Referring to claim 5, see rejection of claim 2 above.

Referring to claim 19, see rejection of claim 2 above.

Referring to claim 22, see rejection of claim 2 above.

9) Claims 13-14 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClendon, further in view of Elsberry, further in view of Archibald (U.S. Pat 4,705,506).

Referring to claims 13-14, McClendon and Elsberry teach the above. However, they do not explicitly teach that the processor further includes an override mode, the processor being configured such that when in the override mode, the processor does not run the verification mode, nor that the processor is configured to store data in memory indicating it was configured for an override mode.

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Archibald teaches a fluid system comprising fluid supplies and pumps whereby an override features may be enabled to allow a pump to run without interruption (col. 6 lines 14-32) and whereby the processor may utilized associated memory (col. 4 lines 11-15).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize an override feature in the system above and to note the override in memory since this would allow a fluid pump to intentionally be run above or below normal operating conditions (Archibald, col. 6 lines 25-32) and since memory associated with a system processor is capable of storing the history of processing decisions.

Referring to claim 30-31, see rejection of claims 13-14 above

10) Claims 15-16 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClendon, further in view of Elsberry, further in view of Peterson, further in view of Archibald.

Referring to claims 15-16, see rejection of claims 13-14 above.

Referring to claims 32-33, see rejection of claims 13-14 above.

11) Claims 17 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClendon, further in view of Elsberry, further in view of Archibald, further in view of Zaitso (U.S. PG PUB 2004/0193328).

Referring to claim 17, McClendon, Elsberry, and Archibald teach the above. However, they do not explicitly teach a drug library in which is stored a data base of drugs, wherein the drug data base also includes instructions linked to selected drugs to instruct the processor to run

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the connection verification mode; and an input device coupled to the processor by which a selection of a drug from the drug data base is made; wherein the processor receives the drug selection from the input device, accesses the drug library, and is configured in the connection verification mode in the event that such an instruction is linked to the selected drug.

Zaitsu teaches the use of a drug library whereby a selection of drugs is made and whereby processing may be linked to a selected drug (Paragraph 0056).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize a drug library in the invention taught above since this would allow medical staff to choose appropriate drugs and automatically configure the pumps (Zaitsu, Paragraph 0056).

Referring to claim 34, see rejection of claim 17 above.

12) Claims 36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClendon, further in view of Peterson.

Referring to claim 36, see rejection of claim 2 above.

Referring to claim 39, see rejection of claim 2 above.

13) Claims 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClendon, further in view of Archibald.

Referring to claims 45-46, see rejection of claims 13-14 above.

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14) Claims 47-48 are rejected under 35 U.S.C. 103 (a) as being unpatentable over McClendon, further in view of Peterson, further in view of Archibald.

Referring to claims 47-48 see rejection of claims 13-14 above.

15) Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over McClendon, further in view of Archibald, further in view of Zaitso.

Referring to claim 49, see rejection of claim 17 above.

Conclusion

16) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kraushaar (U.S. Pat 6,613,012) – teaches an IV identification system.

Verkaart et al (U.S. Pat 6,325,422) – teaches a filter bag connection identification system.

Butterfield (U.S. Pat 5,827,223) – teaches an upstream occlusion detection system.

17) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander J Kosowski whose telephone number is 571-272-3744.


The examiner can normally be reached on Monday through Friday, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. In addition, the examiner's RightFAX number is 571-273-3744.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Alexander J. Kosowski
Patent Examiner
Art Unit 2125

A handwritten signature in black ink, appearing to read "L. P. Picard", written diagonally across the page.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100